AGENDA ITEM D-3

CITY OF LODI
COUNCIL COMMUNICATION

AGENDA TITLE: Adopt Resolution Authorizing a Sole Source Procuremen, of Outage Management and Trouble Call Systems from Survalent Technology of Mississauga, Ontario, Canada ($54,300) (EUD)

MEETING DATE: December 2, 2009

PREPARED BY: Interim Electric Utility Director

RECOMMENDED ACTION: Adopt a resolution authorizing a sole source procurement of Outage Management and Trouble Call Systems from Survalent Technology (Survalent) of Mississauga, Ontario, Canada in an amount not to exceed $54,300.

BACKGROUND INFORMATION: A critical function of the Electric Utility Department is the ability to shorten power outages and monitor the electric distribution system down to the customer meter level.

On February 6, 2008, the City Council awarded the installation of new Supervisory Control And Data Acquisition system (SCADA) to Survalent Technology of Mississauga, Ontario, Canada. The new SCADA has been in full operation for almost a year and uses the existing fiber optic loop for communication. The SCADA remotely controls and monitors 60kV and 12kV equipment using intelligent electronic devices and remote terminal units (RTU). The proposed Survalent Outage Management and Trouble Call Systems (OMS/TCS) will be integrated with the SCADA to expand electric distribution system monitoring down to the customer meter level. Addition of Survalent OMS/TCS will embark the initial stage of migrating the City's electrical distribution system towards smart grid.

The proposed Survalent OMS/TCS would include the following features and functionalities:

1) Electronic representation of the Low Voltage Electrical Network down to the customer meter level including the distribution transformers and the low voltage lines and switches
2) Automatic import of the geographic and electrical maps of the Low Voltage Electrical Network from the existing Lodi AutoCad files;
3) Import of the customer billing and metering information (customer address details, account number, meter number, transformer and feeder information) from the existing Lodi CIS (Customer Information System);
4) Customer call handling and outage management including assignment of crews in the field, automatic generation of Work Orders for the assigned crews;
5) Automatic calculation of the industry standard reliability indices, such as Customer Average Interruption Duration Index, for a period and per outage;
6) Automatic update of any switching operation in the SCADA Medium Voltage network onto the Low Voltage network maps with automatic tracing of the de-energized feeders;
7) Easy update of the database of the Low Voltage Network both from AutoCad and CIS.

APPROVED: _____
Blair King, City Manager

To add these features and functions to the Survalent SCADA would require the use of the Survalent OMS/TCS.

Survalent is a business partner of Hometown Connections, Inc., a utility services subsidiary of the American Public Power Association (APPA) that supports APPA members by securing national group pricing and service arrangements from leading industry suppliers.

The integration of the Survalent OMS/TCS with SCADA would reduce outage durations, increase operational and personnel efficiencies, improve customer satisfaction, improve reliability of electric service, initiate the development and implementation of smart grid for the City of Lodi electrical distribution system. This is a turn-key project and the executive summary describing the Survalent OMS/TCS proposal is attached.

FISCAL IMPACT: Not to exceed $54,300 including tax and shipping. Shortening outages would be expected to reduce overtime costs and restoring service more quickly would increase sales revenues, mitigating the cost of the system by an unquantified amount.

FUNDING: Account No. 160651.7719.

Jordan Ayers
Deputy City Manager/Internal Services Director

Kenneth A. Weisel
Interim Electric Utility Director

Prepared By: Demy Bucaneg, Jr., P.E., Assistant Electric Utility Director

KW/DB/lst

Attachments

Survalent Technology
2600 Argentia Road, Mississauga, Ont., L5N 5V4, Canada
Phone: (905) 826-5000 Fax: (905) 826-7144
www.survalent.com

Lodi Electric Utility Department
1331 S. Ham Lane
Lodi, CA 95242

November 10th, 2009

Survalent Technology – Outage Management - Proposal No. Q09-09-9637

Executive Summary

The existing Survalent SCADA System of Lodi EUD operates the Medium Voltage Electrical Network of the City of Lodi down to the substation level. This Proposal would expand the scope of operation of the Survalent system to include the Low Voltage Electrical Network down to the customer meter level. The additional functionality would include the following main functions:

1) Electronic representation of the Low Voltage Electrical Network down to the customer meter level including the distribution transformers and the low voltage lines and switches
2) Efficient import of the geographic and electrical maps of the Low Voltage Electrical Network from the existing Lodi AutoCad files;
3) Import of the customer billing and metering information (customer address details, account number, meter number, transformer and feeder information) from the existing Lodi CIS (Customer Information System);
4) Customer call handling and outage management including assignment of crews in the field, automatic generation of Work Orders for the assigned crews;
5) Automatic calculation of the Reliability Indices such as CAIFI, SAIFI, etc. on a time window and outage basis;
6) Automatic update of any switching operation in the SCADA Medium Voltage network onto the Low Voltage network maps with automatic tracing of the de-energized feeders;
7) Easy update of the database of the Low Voltage Network both from AutoCad and CIS.

The above functionality would bring about substantial and tangible benefits to Lodi EUD such as:

a) Reduced outage durations by reducing the time to locate by more than 30%;
b) Increased efficiency by reducing operations and personnel costs by 25%;
c) Improved customer satisfaction by automatically identifying all customers affected by the same outage and calling the customers with the predicted time of resolution of the outage;
d) Improved Reliability Indices as a measure of customer service satisfaction.

The list of deliverables which are included in the proposed scope of supply is as follows:

i. One (1) additional Server Computer to be installed in the same enclosure with the existing SCADA servers. Due to the large number of additional data points of the Low Voltage network, the computing power of an additional server is required;

ii. Two (2) additional Workstation Client computers to be used by the Dispatchers in the Control Room for monitoring the Low Voltage Network;
iii. Additional OMS (Outage Management) and TCS (Trouble Call Management) software for the Low Voltage Network including licenses for the above two (2) Workstation Clients;
iv. Software license for the software to update the database of the Low Voltage Network;
v. Software license for the interface to the existing Lodi CIS (Customer Information System)
vi. Initial import of the Low Voltage Network database and maps from the Lodi AutoCad;
vii. Two (2) weeks of on-site assistance for commissioning and training of Lodi EUD staff;
viii. One (1) year of warranty on the above hardware and software.

The total cost of this expansion proposed by Survalent Technology is $49,000.00 including the hardware, software, network database import, on-site installation and commissioning, training and warranty, as detailed above.

Survalent Technology assures Lodi EUD that the project will be implemented within the proposed budget and time schedule to Lodi EUD's full satisfaction, if Survalent Technology is awarded the project.

Sincerely,

Mike Roth
Vice President Sales, US Western Region
Survalent Technology Corporation

RESOLUTION NO. 2009-167

A RESOLUTION OF THE LODI CITY COUNCIL AUTHORIZING THE SOLE SOURCE PROCUREMENT OF OUTAGE MANAGEMENT AND TROUBLE CALL SYSTEMS FROM SURVALENT TECHNOLOGY

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WHEREAS, Lodi Municipal Code §3.20.070 authorizes dispensing with bids for purchases of supplies, services, or equipment when it is in the best interest of the City to do so; and

WHEREAS, a critical function of the Electric Utility Department is the ability to shorten power outages and monitor the electric distribution system down to the customer meter level; and

WHEREAS, on February 6, 2008, the City Council awarded the installation of new supervisory control and data acquisition system (SCADA) to Survalent Technology to remotely monitor and control the 60kV and 12kV equipment at the substation level using intelligent electronic devices and remote terminal units through the existing fiber optic loop; and

WHEREAS, proposed Survalent Outage Management and Trouble Call Systems will integrate with SCADA to expand electric system monitoring down to the customer meter level and to initiate migration to smart grid system; and

WHEREAS, Survalent Outage Management and Trouble Call Systems would include features and functions as follows: electronic model of low voltage electrical network, automatic import of geographic and electrical maps, import of customer billing and metering information, customer call handling and outage management, automatic calculation of reliability indices, automatic update of switching operations, and database update of low voltage network from AutoCAD and CIS; and

WHEREAS, staff recommends that the Outage Management and Trouble Call Systems be purchased sole source from Survalent Technology to reduce outage durations, increase efficiency, improve customer satisfaction and system reliability, initiate smart grid implementation, and this is a turn-key project.

NOW, THEREFORE, BE IT RESOLVED that the Lodi City Council does hereby approve the purchase of Outage Management and Trouble Call Systems from Survalent Technology of Mississauga, Ontario, Canada, in the amount not to exceed $54,300 including tax and shipping.

Dated: December 2, 2009

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I hereby certify that Resolution No. 2009-167 was passed and adopted by the City Council of the City of Lodi in a regular meeting held December 2,2009, by the following vote:

AYES: COUNCIL MEMBERS – Hitchcock, Johnson, Katzakian, Mounce, and Mayor Hansen

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None

Jennifer M. Robison

JENNIFER M. ROBISON
Assistant City Clerk